

**ABSTRACT**

A transgenic silkworm having transferred therein a gene which encodes spider thread protein having desired properties of high strength and high elasticity while leaving the silkworm fibroin H chain gene intact, by means of utilizing a transposon function, is used to produce in the transgenic silkworm a spider thread protein having the desired properties without lowering the strength or elasticity of silk thread produced by the transgenic silkworm, thereby providing hybrid silk of spider and silk threads having the desired properties.